

Attorney Docket No.: 01-791 71767

Attorney Ref.: VTA03-29

Amendment dated August 8, 2006 Reply to Office action of May 17, 2006

Application No. 10/099,815

RECEIVED  
CENTRAL FAX CENTER

AUG 08 2006

REMARKS

Claims 1-10 remain in the application. Claims 1 and 6 have been amended. No claim is cancelled or added. Applicants respectfully request allowance of each of the pending claims for reasons presented below.

Claim Objections

Claim 6 has been amended to insert "of" between "each" and "the" in line 3 thereof. Thus, the objection to claim 6 is hereby overcome.

Claim Rejections under 35 U.S.C. §103

Claims 1-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of U.S. Patent No. 6,775,254 to Willenegger et al. (hereinafter referred to as "Willenegger").

Claim 1 of the application is directed to a method of time division multiplexing for a forward data packet channel. The method comprises: encoding parallel data sub-packets into parallel streams of turbo codes; interleaving each of the parallel streams of turbo codes to generate parallel streams of quasi-complementary turbo codes; modulating the parallel streams of quasi-complementary turbo codes to generate parallel streams of modulated data symbols; and multiplexing the parallel streams of modulated data symbols by non-complete puncturing to generate a single stream of modulation symbols, wherein the non-complete puncturing punctures a first set of data sub-packets into a second set of data sub-packets without occupying payload of the second set of data sub-packets. It is noted that the newly added language "wherein the

Best Available Copy

Attorney Docket No.: 01-791 71767

Attorney Ref.: VTA03-29

Amendment dated August 8, 2006 Reply to Office action of May 17, 2006

Application No. 10/099,815

non-complete puncturing punctures a first set of data sub-packets into a second set of data sub-packets without occupying payload of the second set of data sub-packets" is supported by the specification on page 8, lines 17-21.

Willenegger does not teach the claimed non-complete puncturing that punctures a first set of data sub-packets into a second set of data sub-packets. Willenegger teaches a rate matching scheme, in which a number of coded bits in payload of a slot can be punctured or repeated, such that the number of rate-matched bits is equal to the number of available bits in the slot (see, col. 7, lines 4 - 10). The rate matching scheme adjusts the length of coded bits to fit into a slot with a fixed number of available bits. In other words, the puncturing of the rate matching scheme concerns adjusting a single data stream, instead of combining two separate data streams.

Furthermore, Willenegger fails to teach puncturing a first set of data sub-packets into a second set of data sub-packets without occupying payload of the second set of data packets as the claimed invention does. In Willenegger, voice data and packet data are multiplexed by the TDM multiplexer 416 to generate a TDM data stream (see, col. 9, lines 51-53). Each slot of the data frame for the TDM data stream is partitioned into a voice data partition and a packet data partition (see, col. 6, lines 48-53). The rate matching scheme is operated for the voice data to match the available bits of the voice data partition (see, col. 8, lines 62-65). If the payload of the voice data is larger than the voice data partition, a number of coded bits of the voice data can be punctured i.e. deleted (see, col. 8, lines 66-67). As a result, the puncturing in Willenegger can shorten the payload of the voice data. This differs from the claimed invention where the

Best Available Copy

Attorney Docket No.: 01-791 71767

Attorney Ref.: VTA03-29

Amendment dated August 8, 2006 Reply to Office action of May 17, 2006

Application No. 10/099,815

puncturing is performed in a way that the payload of the data packets is not occupied, or shortened.

As such, Willenegger does not teach or suggest the claimed non-complete puncturing. Neither does AAPA teach or suggest the claimed non-complete puncturing. Thus, claim 1 is patentable over the cited prior art references under section 103.

For the same reasons above, the independent claim 6 is also patentable over the cited prior art references under section 103. Accordingly, claims 1-5 and 7-10 that depend on claims 1 and 6, respectively, are patentable over the prior art of record as well.

Rest Available Copy

Attorney Docket No.: 01-791 71767

Attorney Ref.: VTA03-29

Amendment dated August 8, 2006 Reply to Office action of May 17, 2006

Application No. 10/099,815

CONCLUSION

Applicants have made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to a novel subject matter, patentably distinguishable over the prior art of record. The Examiner is therefore, respectfully requested to reconsider and withdraw the outstanding rejections.

Should the Examiner deem that any further clarification is desirable, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

By: \_\_\_\_\_

Ting-Mao Chao

Attorney for Applicant

Limited Recognition No. L0119

Preston Gates & Ellis LLP  
55 Second Street, Suite 1700  
San Francisco, CA 94105-3493  
Telephone: (415) 882-8029  
Facsimile: (415) 882-8220

Best Available Copy